AMENDMENTS TO THE SPECIFICATION:

Please delete the paragraph beginning on page 3, line 16, and ending on page 3, line 18.

Please replace the paragraph beginning at page 4, line 4, with the following rewritten paragraph:

--The idea behind the invention is thus based on filling the inside of the injector with an inert, non-conducting fluid with the highest possible heat conductivity to allow better removal of the waste heat of the actor. The additional lateral heat coupling to the surrounding injector housing thus allows impermissible heating up of the actor even at high operating frequencies to be safely avoided.--

Please replace the paragraph beginning at page 5, line 19, with the following rewritten paragraph:

--In accordance with a particularly advantageous form of embodiment of this actor type the actor external space is also filled over at least part of its length with a second heat-coupling fluid so that in this case too there is a quasi-composite heat conducting bridge from the actor body to the injector housing.--

Please replace the paragraph beginning at page 6, line 4, with the following rewritten paragraph:

--With all embodiments it is of advantage for the actor body to be in direct contact with the fluid over its entire length and for the volume of the air reservoir to be connected to

the fluid-filled part of the fluid chamber without any hydraulic restriction.--

Please replace the paragraph beginning at page 6, line 26, with the following rewritten paragraph:

--Figure 1 shows a multilayer design of an actor body 1 which is incorporated into a tubular spring 2 and is pretensioned by the latter. The actor body 1 is held in position at its upper end face by a header plate 4 which it is connected on its lower ~~fend~~ end face with a foot plate 3 which with a lengthening of the actor body 1 caused by electrical excitation is caused to perform a corresponding axial deflection which is converted directly or indirectly into the lift of a valve needle V. A flexible membrane 5 is hinged on the footer plate 3 on one side and on the injector housing 9 on the other side, which ensures horizontal sealing despite axial movement of footer plate 3. Valve chamber 11 can be refilled via feed lines 12 and 13 (see feed line 12 of Figure 4) in the familiar way with dosing fluid. With such open type actors a movable separator such as the membrane 5 shown or a metal bellows is generally used to keep the dosing medium to be injected, typically gasoline, away from the relatively chemically sensitive piezoceramic.--

Please replace the paragraph beginning at page 7, line 13, with the following rewritten paragraph:

--The space between the jacket surface 1a of actor body 1 and the inner side of injector casing 9 is largely, but not

completely, filled with a heat coupling fluid 6: in the upper area of this space a non-filled air reservoir 7 is recognizably retained, whereas the lower area, as a result of gravity is completely filled with the fluid 6. The fluid 6 penetrates through the openings in the tubular spring 2 and forms a heat conducting bridge from actor body 1 to injector housing 9. The main directions of heat flow shown by the arrows here (and in Figure 4) make it clear that the removal of the heat is significantly improved overall in accordance with the invention by the lateral heat removal (which occurs in addition to the conventional removal of heat via header plate 4) via fluid 6 which has high heat dissipation properties. A part of fluid 6 is also located with this variant below the footer plate 3, that is outside the space defined above.--

Please replace the paragraph beginning at page 9, line 1, with the following rewritten paragraph:

--Figure 3 shows an actor of the closed type in which the actor body 1 is encapsulated fluid sealed. This can, as shown, be realized particularly by welding actor body 1 into a fluid-sealed metal bellows 14. If the actor is triggered via the electrical connections 15 it expands. In this case the header plate 4 is supported against an opposing support (e.g. solid rear panel or hydraulic bearing) and the movable footer plate 3 is pressed downwards. The removal of the heat generated is again made easier in accordance with the invention when the actor

internal space 27, that is the space between the metal bellows 14 and the actor body 1, is, as shown, is at least partly filled with the heat coupling fluid 6.--

Please replace the paragraph beginning at page 9, line 12, with the following rewritten paragraph:

--This is to be realized in an advantageous manner when the injector, as shown in Figure 4, is operated with a familiar hydraulic bearing 16. It is particularly favorable if the actor external space 17 between the metal bellows 14 and the injector housing 9 is also filled with a second warm coupling fluid (not shown) that can be distinguished from the first warm-coupling fluid 6. It must in particular be neither chemically compatible with the piezoceramic nor non-conductive. This therefore increases the choice of the possible second heat coupling fluid. In particular a fluid that is already present in the injector, for example the gasoline itself, or the fluid, which is used for the hydraulic support [[6]] 16, can be introduced as a second heat coupling fluid.--